

GOVERNMENT OF RAJASTHAN
BOARD OF TECHNICAL EDUCATION RAJASTHAN
JODHPUR

SEMESTER SCHEME-2020-21

(SESSION 2021-2022 & ONWARDS)



TEACHING AND EXAMINATION SCHEME
AND SYLLABUS

ELECTRONICS ENGINEERING

(EL)

Curriculum Development Cell
Board of Technical Education, Rajasthan
W-6 Residency Road,
Jodhpur

GOVERNMENT OF RAJASTHAN
BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR
TEACHING AND EXAMINATION SCHEME
(SEMESTER SCHEME-2020-21)

FOR DIPLOMA III SEMESTER (ELECTRONICS ENGINEERING) (EL)
SESSION 2021-2022 & ONWARDS

Subject Category	Subject Code	Subjects	Distribution of Time						Distribution of Max. Marks/Duration						Total Marks	Credits
			Hours per week			End Semester Exam			Internal Assessment			PR(S)				
			L	T	P	Tot	TH	Hrs.	PR	Hrs.	CT		TU/As	sign		
PC	**EL 3001	Principles of Electronic Communication	4	0	0	4	60	3	--	--	20	20	--	100	4	
PC	*EL 3002	Electronic Devices and Circuits	3	0	0	3	60	3	--	--	20	20	--	100	3	
PC	[§] EL 3003	Digital Electronics	3	0	0	3	60	3	--	--	20	20	--	100	3	
PC	EL 3004	Electronic Measurements and Instrumentation	3	0	0	3	60	3	--	--	20	20	--	100	3	
PC	***EL 3005	Electric Circuits and Network	2	1	0	3	60	3	--	--	20	20	--	100	3	
PC	**EL 3006	Principles of Electronic Communication Lab	0	0	2	2	--	--	40	--	--	--	60	100	1	
PC	*EL 3007	Electronic Devices and Circuits Lab	0	0	2	2	--	--	40	--	--	--	60	100	1	
PC	*EL 3008	Digital Electronics Lab	0	0	2	2	--	--	40	--	--	--	60	100	1	
PC	EL 3009	Electronic Measurements and Instrumentation Lab	0	0	2	2	--	--	40	--	--	--	60	100	1	
SI	EL 3010	Summer Internship-(4 weeks after II Sem)	--	--	--	--	--	--	100	--	--	--	--	100	2	
VS	*EL 3333	Anandam (Joy of Giving)	--	--	1	1	--	--	--	--	--	--	100	100	2	
		Students Centered Activities	0	0	3	3	--	--	--	--	--	--	--	--	--	
		Total	15	1	12	28	300	300	260	100	100	100	340	1100	24	

Grand Total :

- L : Lecture
- T : Tutorial
- P : Practical
- TH : Marks for End Semester Exam for Theory
- PR : Marks for End Semester Exam for Practical
- CT : Marks for class tests (Internal Assessment)
- TU/Assi : Marks for tutorials/Assignment (Internal Assessment)
- PR(S) : Marks for practical and viva (Internal Assessment)

- *EL 3333 is same in all branches of Engineering
- *EL 3002, *EL 3007 and *EL 3008 are same as EF/ER/RA 3002, EF/ER/RA 3007 and EF/ER/RA 3008
- [§]EL 3003 is same as EF/ER/RA/MT 3003
- **EL 3001 and **EL 3006 are same as EF 3001 and EF 3006 respectively
- ***EL 3005 is same as EF/ER 3005

GOVERNMENT OF RAJASTHAN
BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR
TEACHING AND EXAMINATION SCHEME
(SEMESTER SCHEME-2020-21)
FOR DIPLOMA IV SEMESTER (ELECTRONICS ENGINEERING) (EL)
SESSION 2021-2022 & ONWARDS

Subject Category	Subject Code	Subjects	Distribution of Time				Distribution of Max. Marks/Duration						Total Marks	Credits		
			Hours per week				End Semester Exam			Internal Assessment						
			L	T	P	Tot	TH	Hrs	PR	Hrs	CT	TU/Assi			PR(S)	
PC	**EL 4001	Microcontroller and Applications	3	0	0	3	60	3	-	-	20	20	-	-	100	3
PC	EL 4002	Consumer Electronics	3	0	0	3	60	3	-	-	20	20	-	-	100	3
PC	EL 4003	Digital Communication Systems	3	0	0	3	60	3	-	-	20	20	-	-	100	3
PE	EL 4004	Programme Elective- I **EL40041- Electronic Equipment Maintenance ***EL40042- Simulation Software	3	0	0	3	60	3	-	-	20	20	-	-	100	3
PE	EL 4005	Programme Elective II ***EL40051- Linear Integrated Circuits *EL40052- Power Electronics	3	0	0	3	60	3	-	-	20	20	-	-	100	3
PC	**EL 4006	Microcontroller and Applications Lab	0	0	2	2	-	-	40	3	-	-	60	60	100	1
PC	EL 4007	Digital Communication Systems Lab	0	0	2	2	-	-	40	3	-	-	60	60	100	1
PE	EL 4008	Programme Elective- I Lab **EL40081- Electronic Equipment Maintenance Lab ***EL40082- Simulation Software Lab	0	0	2	2	-	-	40	3	-	-	60	60	100	1
PE	EL 4009	Programme Elective II Lab ***EL40091- Linear Integrated Circuits Lab *EL40092- Power Electronics Lab	0	0	2	2	-	-	40	3	-	-	60	60	100	1
PR	EL 4010	Minor Project	0	0	4	4	-	-	40	-	-	-	60	60	100	2
AU	*EL 4222	Essence of Indian Knowledge and Tradition	2	0	0	2	-	-	-	-	-	-	-	-	-	0
VS	*EL 4444	Anandam (Joy of Giving)	-	-	1	1	-	-	-	-	-	-	100	100	100	2
		Students Centered Activities	0	0	3	3	-	-	-	-	-	-	-	-	-	-
		Total	17	0	16	33	300	300	200	100	100	100	400	Grand Total :	1100	23
															1100	23

1. L : Lecture
2. T : Tutorial
3. P : Practical
4. TH : Marks for End Semester Exam for Theory
5. PR : Marks for End Semester Exam for Practical
6. CT : Marks for class tests (Internal Assessment)
7. TU/Assi : Marks for tutorials/Assignment (Internal Assessment)
8. PR(S) : Marks for practical and viva (Internal Assessment)

1. *EL 4222 and *EL 4444 are same in all branches of Engg.
2. *EL40052 and *EL40092 are same as EF/ER/RA 40052and EF/ER/RA 40092 respectively
3. **EL 4041 and **EL 4081 are same as EF 40041 and EF 40081 respectively
4. ***EL 4001, ***EL 40042, ***EL 40051, **EL 4006, ***EL 40082 and ***EL 40091 are same as EF/ER 4001, EF/ER 4042, EF/ER 4051, EF/ER 4006, EF/ER 4082 and EF/ER 40091 respectively

Student Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning

Note: Students will go for 6 Weeks Summer Internship in the Summer Vacations after Fourth Semester. The assessment of the Summer Internship will be done in Fifth Semester

GOVERNMENT OF RAJASTHAN
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TEACHING AND EXAMINATION SCHEME
(SEMESTER SCHEME-2020-21)
FOR DIPLOMA V SEMESTER (ELECTRONICS ENGINEERING)
SESSION 2022-2023 & ONWARDS

Subject Category	Subject Code	Subjects	Distribution of Time										Distribution of Max. Marks/Duration				Total Marks	Credits
			Hours per week							End Semester Exam			Internal Assessment					
			L	T	P	Tot	TH	Hrs.	PR	Hrs.	CT	TU/Assi	PR(S)					
PC	**EL 5001	Embedded Systems	4	0	0	4	60	3	-	-	-	20	20	-	100	4		
PC	**EL 5002	Mobile and Wireless Communication	3	0	0	3	60	3	-	-	-	20	20	-	100	3		
OE	+EL 5100	Open Elective-I *EL 51001- Economic Policies in India *EL 51002- Engineering Economics & Accountancy	3	0	0	3	60	3	-	-	-	20	20	-	100	3		
PE	EL 5003	Programme Elective III *EL50031- Industrial Automation *EL50032- Control System And PLC	3	0	0	3	60	3	-	-	-	20	20	-	100	3		
PE	EL 5004	Programme Elective IV **EL50041- Microwave and RADAR EL50042- Optical Communication and networking	3	0	0	3	60	3	-	-	-	20	20	-	100	3		
PC	***EL 5005	Embedded Systems Lab	0	0	2	2	-	-	-	40	3	-	-	60	100	1		
PC	**EL 5006	Mobile and Wireless Communication Lab	0	0	2	2	-	-	-	40	3	-	-	60	100	1		
PE	EL 5007	Programme Elective III Lab *EL50071- Industrial Automation Lab *EL50072- Control System And PLC Lab	0	0	2	2	-	-	-	40	3	-	-	60	100	1		
PE	EL 5008	Programme Elective IV Lab **EL50081- Microwave and RADAR Lab EL50082- Optical Communication and networking Lab	0	0	2	2	-	-	-	40	3	-	-	60	100	1		
SI	EL 5009	Summer Internship-II(6 weeks after IV S Lab)	0	0	0	0	-	-	-	100	-	-	-	-	100	3		
PR	EL 5010	Major Project	0	0	2	2	-	-	-	-	-	-	-	-	-	-		
VS	+EL 5555	Anandam (Joy of Giving)	-	-	1	1	-	-	-	-	-	-	-	100	100	2		
		Students Centered Activities	0	0	3	3	-	-	-	-	-	-	-	-	-	-		
		Total	16	0	14	30	300	300	260	100	100	100	340	Grand Total :	1100	25		

1. L : Lecture

2. T : Tutorial

3. P : Practical

4. TH : Marks for End Semester Exam for Theory

5. PR : Marks for End Semester Exam for Practical

6. CT : Marks for class tests (Internal Assessment)

7. TU/Assi : Marks for tutorials/Assignment (Internal Assessment)

8. PR(S) : Marks for practical and viva (Internal Assessment)

1. *EL 51001, *EL 51002 and *EL 5555 are same in all branches of Engineering
 2. *EL 50031, *EL 50032, *EL 50071, *EL 50072, and are same as EF/ ER/RA 50031, EF/ ER/RA 50032, , EF/ ER/RA 50071, and EF/ ER/RA 50072, respectively
 3. **EL 5002, **EL 50041, **EL 5006 and **EL 5081 are same as EF 5002, EF 50041, EF 5006 and EF 50081 respectively
 4. ***EL 5001 and ***EL 5005 are same as EF/ER 5001 and EF/ER 5005 respectively

Student Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.

Note: Major Project will be continued and Assesed in VI Semester

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TEACHING AND EXAMINATION SCHEME
(SEMESTER SCHEME-2020-21)
FOR DIPLOMA VI SEMESTER (ELECTRONICS ENGINEERING)
SESSION 2022-2023 & ONWARDS

Subject Category	Subject Code	Subjects	Distribution of Time							Distribution of Max. Marks/ Duration							Total Marks	Credits			
			Hours per week							End Semester Exam									Internal Assessment		
			L	T	P	Tot	TH	Hrs	PR	Hrs	CT	TU/Assi	PR(S)	CT	TU/Assi	PR(S)					
HS	+EL 6111	Entrepreneurship and Startups	3	1	0	4	60	3	-	-	20	20	-	-	100	4					
OE	+EL 6200	Open Elective-II +EL 62001- Project Management +EL 62002- Renewable Energy Technologies	3	0	0	3	60	3	-	-	20	20	-	-	100	3					
OE	+EL 6300	Open Elective-III +EL 63001- Product Design +EL 63002- Disaster Management	3	0	0	3	60	3	-	-	20	20	-	-	100	3					
AU	+EL 6333	Indian Constitution	2	0	0	2	-	-	-	-	-	-	-	-	-	0					
PC	EL 6001	Computer Networking and Data Communication	4	0	0	4	60	3	-	-	20	20	-	-	100	4					
PC	EL 6002	Computer Networking and Data Communication Lab	0	0	2	2	-	-	40	3	-	-	60	100	1						
PR	EL 6003	Major Project	0	0	6	6	--	--	40	--	--	--	60	100	4						
SE	EL 6004	Seminar	1	0	0	1	-	-	-	-	-	-	100	100	1						
VS	+EL 6666	Anandam (Joy of Giving)	--	--	1	1	--	--	--	--	--	--	100	100	2						
		Students Centered Activities	0	0	3	3	--	--	--	--	--	--	--	--	--						
		Total	16	1	12	29	240		80		80	80	320	800	22						
													Grand Total :			800	22				

1. L : Lecture
2. T : Tutorial
3. P : Practical
4. TH : Marks for End Semester Exam for Theory

5. PR : Marks for End Semester Exam for Practical
6. CT : Marks for class tests (Internal Assessment)
7. TU/Assi : Marks for tutorials/Assignment (Internal Assessment)
8. PR(S) : Marks for practical and viva (Internal Assessment)

1. +EL 6111, +EL 62001, +EL 62002, +EL 63001, +EL 63002, +EL 6333 and +EL 6666 are same in all branches of Engineering Student Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.